Claims

1. Mixtures of substances based on organopolysiloxane polyether, characterized in that, as further substance or component, use is made of a polymer obtained from aqueous suspension, preferably crosslinked functionalized polystyrene polymer beads.

2. Use of the mixtures of substances according to Claim 1 as free-flowing ion exchangers or free-flowing adsorbers, preferably free-flowing monodisperse or heterodisperse ion exchangers.

3. Mixtures of substances according to Claim 1, characterized in that, in addition to an organopolysiloxane polyether, they comprise crosslinked polystyrene polymer beads functionalized to form cation exchangers and/or polystyrene polymer beads functionalized to form anion exchangers.

4. Process for producing free-flowing ion exchangers, characterized in that an organopolysiloxane polyether and crosslinked functionalized polystyrene polymer beads are mixed.

5. Mixtures of substances according to Claim 1, characterized in that the organopolysiloxane polyether has a molar mass of 200 to 20 000.

6. Process according to Claim 4, characterized in that a combination of organopolysiloxane polyether and oil is used.

7. Process according to Claim 4, characterized in that the organopolysiloxane polyether is used in an amount of 0.4 g to 15 g per litre of crosslinked functionalized polystyrene polymer beads.

8. Process according to Claim 4, characterized in that the organopolysiloxane polyether is used in an amount of 0.5 gram to 20 gram per litre of aqueous solution.

9. Process according to Claim 6, characterized in that the oil is used in an amount of 0.2 g to 8 g per litre of crosslinked functionalized polystyrene polymer beads.

10. Process according to Claim 4, characterized in that the crosslinked functionalized polystyrene polymer beads are additionally treated in aqueous suspension with introduction of air, nitrogen or other gases.

11. Use of the mixtures of substances according to Claim 1 for filling cartridges and filters.

12. Cartridges comprising a mixture of substances according to Claim 1.

13. Use of mixtures of substances of organopolysiloxane polyethers and crosslinked polystyrene polymer beads functionalized to form anion exchangers

- for removing anions from aqueous or organic solutions or their vapours,
- for removing anions from condensates,
- for removing colour particles from aqueous or organic solutions,
- for decolorizing and desalting glucose solutions, wheys, dilute gelatin broths, fruit juices, fruit musts or sugars, preferably mono- or disaccharides, in particular fructose solutions, cane sugar, beet sugar solution, for example in the sugar industry, dairies, starch industry and in the pharmaceutical industry,
- for removing organic components from aqueous solutions, for example humic acids from surface water,
- for purifying and treating waters in the chemical industry and electronics industry, in particular for producing ultrapure water,
- in combination with gel-type and/or macroporous cation exchangers for demineralizing aqueous solutions and/or condensates, in particular in the sugar industry.

14. Use of mixtures of substances of organopolysiloxane polyether with crosslinked polystyrene polymer beads functionalized to form cation exchangers

- for removing cations, colour particles or organic components from aqueous or organic solutions and condensates, for example process condensates or turbine condensates,

- for softening, in neutral exchange, aqueous or organic solutions and condensates, for example process condensates or turbine condensates,

- for purifying and treating waters in the chemical industry, the electronics industry and power stations,

- for demineralizing aqueous solutions and/or condensates, characterized in that these are used in combination with gel-type and/or macroporous anion exchangers,

- for decolorizing and desalting wheys, dilute gelatin broths, fruit juices, fruit musts and aqueous solutions of sugars,

- for drinking water treatment or for producing ultrapure water (necessary in microchip production for the computer industry), for the chromatographic separation of glucose and fructose, and as catalysts for various chemical reactions (for example in the production of bisphenol A from phenol and acetone).